

## WHAT IS CLAIMED IS:

- 1                   1.     An electric vehicle comprising:  
2                   an axle,  
3                   wheels supported on said axle,  
4                   a drive unit for rotating said axle,  
5                   a power supply unit for feeding electric power to said drive unit,  
6                   wherein said drive element includes a motor,  
7                   said motor includes a stator core having a plurality of teeth parts, a  
8                   concentrated winding applied over each teeth part of said plurality of teeth parts  
9                   and a rotor incorporating a plurality of permanent magnets, and each of said  
10                  plurality of permanent magnets is provided at a larger pitch than the stator coil  
11                  pitch.  
1                   2.     The electric vehicle of claim 1, wherein said rotor further  
2                   includes an iron as a flux of magnetic induction, said iron being disposed between  
3                   said each permanent magnet.  
1                   3.     An electric vehicle comprising:  
2                   an axle,  
3                   wheels supported on said axle,  
4                   a drive unit for rotating said axle,  
5                   a power supply unit for feeding electric power to said drive unit,  
6                   wherein said drive element includes a motor and an engine,

7               said motor includes a stator core having a plurality of teeth parts, a  
8   concentrated winding applied over each teeth part of said plurality of teeth parts  
9   and a rotor incorporating a plurality of permanent magnets, and

10             each of said plurality of permanent magnets is provided at a larger  
11   pitch than the stator coil pitch.

1             4.     An electric vehicle comprising:

2             an axle,

3             wheels supported on said axle,

4             a drive unit for rotating said axle,

5             a power supply unit for feeding electric power to said drive unit,

6             wherein said drive element includes a motor,

7             said motor includes a stator core having a plurality of teeth parts, a  
8   concentrated winding applied over each teeth part of said plurality of teeth parts  
9   and a rotor incorporating a plurality of permanent magnets,

10            said stator core is formed in an annular form by combining said  
11   plurality of core elements, and

12            each of said plurality of permanent magnets is provided at a larger  
13   pitch than the stator coil pitch.

1             5.     The electric vehicle of claim 4, wherein said each teeth part  
2   includes an outer circumference part, and said each teeth part is combined by  
3   fitting parts disposed at end portion of said outer circumference part.

1             6.     An electric vehicle comprising:

2 an axle,  
3 wheels supported on said axle,  
4 a drive unit for rotating said axle, and  
5 a power supply unit for feeding electric power to said drive unit,  
6 wherein said drive element includes a motor,  
7 said motor includes a stator core having a plurality of teeth parts, a  
8 concentrated winding applied over each teeth part of said plurality of teeth parts  
9 and a rotor incorporating a plurality of permanent magnets,  
10 each of said plurality of permanent magnets is provided at a larger  
11 pitch than the stator coil pitch,  
12 said plurality of permanent magnet are arranged around a center  
13 thereof,  
14 at least one of said plurality of permanent magnets has a magnet  
15 forward portion and a magnet backward portion each having respective surfaces  
16 facing said stator core and angled toward each other.

1 7. An electric vehicle comprising  
2 an axle,  
3 wheels supported on said axle,  
4 a drive unit for rotating said axle, and  
5 a portion supply unit for feeding electric power to said rive unit,

6 wherein said drive element includes a motor,  
7 said drive element includes a motor,  
8 said motor includes a stator core having a plurality of teeth parts, a  
9 concentrated winding applied over each teeth part of said plurality  
10 of teeth parts and a rotor incorporating a plurality of permanent magnets,  
11 each of said plurality of permanent magnets is provided at a larger  
12 pitch than the stator coil pitch,  
13 said plurality of permanent magnet are arranged around a center  
14 thereof, and  
15 at least one of said plurality of permanent magnets has a side facing  
16 said stator core which is intended inward towards said center.

1 8. An electric vehicle comprising:  
2 an axle,  
3 wheels supported on said axle,  
4 a drive unit for rotating said axle, and  
5 a power supply unit for feeding electric power to said drive unit,  
6 wherein said drive element includes a motor,  
7 said drive element includes a motor,  
8 said motor includes a stator core having a plurality of teeth parts, a  
9 concentrated winding applied over each teeth part of said plurality of teeth parts  
10 and a rotor incorporating a plurality of permanent magnets,

11                   each of said plurality of permanent magnets is provided at a larger  
12   pitch than the stator coil pitch, and

13                   a first outer periphery portion of said rotor is of different shape than  
14   a second outer periphery portion of said rotor without said second outer periphery  
15   portion being situated directly between any of said magnet.